

REMARKS

Claims 11-19 are pending on the present application. None of the claims were amended in this response. The Applicants respectfully request reconsideration of the rejections based on the following comments.

The present paper follows Applicant's Appeal Brief, filed on April 13, 2005, wherein Claims 11-13 and 15 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Rohani et al, (U.S. Patent No. 5,390,166), in view of Tamioca (US Patent 5,452,115). The Applicants respectfully traverse this rejection for the following reasons.

Specifically, Rohani does not teach or suggest the claim element of "transmitting data in a number of time slots using a time-division multiplex method . . . wherein each of the active time slots is followed by an inactive time slot." The portion of Rohani that has been repeatedly relied upon by the Office Action (col. 2, lines 4-9) misinterprets the disclosure contained therein, and further does not comport to the remainder of the rejection. Rohani generally discloses the use of TDMA communication (col. 2, lines 4-9, 47-50). However, the generic description of TDMA communication is used in the context of deficiencies in the prior art (col. 2, lines 29-46, 63-66).

Rohani then discloses the use of TDMA frames in FIG. 4 (col. 3, lines 40-42). However, the frame shown in FIG. 4 teaches that this data only contains a single transmit time slot 41, whereas all other "active" time slots (e.g., 43) are used to receive data. No teaching or suggestion is given, however, that the base transmitters 14-16 transmit data in a number of time slots where the data is "transmitted in active time slots, wherein each of the active time slots is followed by an inactive time slot in which no data is transmitted" as featured in claim 11. Such teaching could not even be inferred from Rohani, because the frame 40 shown in Fig. 4 and accompanying text (e.g., col. 3, 11. 53-55), teaches that a subscriber receives the same data from each of the different transceivers 14, 15, 16 by switching frequencies (slots 42, 44, 46) to be able to receive from each of these transceivers. Thus, Rohani actually would teach away from any inference or suggestion since the carrier frequencies of the transceivers 14-16 appear to be constant, such that the mobile subscriber switches between these fixed frequencies in order to receive substantially the same data from each of these respective transceivers during time slots 43, 45 and 47.

Also, Rohani merely teaches that frame 40 has time slots for transmitting (e.g., time slot 41) and receiving (e.g. time slot 43) and time slots for switching frequencies, (e.g., time slot 42). As state previously, Rohani teaches that the system may be designed to receive a transmission burst and change frequencies in a single time slot. As an example, Rohani suggests slots 44 and 45 can be portions of a single time slot. Notwithstanding, this teaching is not tantamount to a teaching that meets or suggests the claim element of “each of the active time slots as followed by an inactive time slot in which no data is transmitted.”

The Office Action now concedes that Rohani fails to teach that inactive time slots have a time duration shorter than a time duration of an active time slot. However, the Office Action goes further in relying on Tomioca in an attempt to solve the deficiencies of Rohani. Applicants submit the combination is improper, as Tomioca fails to teach the claimed features, and was also improperly combined with Rohani.

Tomioca merely discloses that in an optical communication system which uses wavelength division multiplexing and time division multiplexing in combination, one time slot can become very long in duration (10 to 100 times) in comparison with a cell that is a unit of information transfer in ATM (asynchronous transfer mode) switching (col. 19, lines 32-42). For broadcast/multicast communications, Tomioca teaches that when data is transmitted from one node for broadcast/multicast, the data is maximized to have the data quantity fill one time slot. (col. 19, lines 44-47). If, however, only one terminal on a lower network, which is allocated one time slot, transmits data, the time slot can may nearly empty, and with a system in which several nodes are interconnected to both transmit and receive, such as a video conference system, a lot of time slots might be occupied with each slot nearly empty, resulting in poor efficiency (col. 19, lines 47-55). Accordingly, Tomioca teaches that time slots kept for broadcast/multicast communications be set shorter in duration than other time slots as shown in FIG. 13A.

It is clear from the disclosure in Tomioca that the document doesn't teach that each of the active time slots is followed by an inactive time slot in which no data is transmitted, where the inactive time slot has a time duration shorter than a time duration of an active time slot as recited in the claims. Tomioca makes no distinction whatsoever as to which time slot is “active” or not. Tomioca merely teaches that, in systems utilizing both WDM and TDM, the long time slots will result in the inefficient transmission of nearly-empty (not “inactive”) timeslots due to size

constraints present in a respective time slot. By utilizing consistently smaller time slots for broadcast/multicast communication, data can be more efficiently grouped to result in fewer unused portions within those time slots (col. 19, line 63 – col. 20, line 16).

Furthermore, Applicants submit that there is no teaching, suggestion or motivation for one of ordinary skill in the art to combine the Rohani and Tomioca references in the manner suggested in the Office Action. In making a determination that an invention is obvious, the Patent Office has the initial burden of establishing a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S. P.Q.2d 1955, 1956 (Fed. Cir. 1993). “If the examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent.” *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992).

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. “To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). (see MPEP 2142).

Further, the Federal Circuit has held that it is “impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). “One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention” *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Moreover, the Federal Circuit has held that “obvious to try” is not the proper standard under 35 U.S.C. §103. *Ex parte Goldgaber*, 41 U.S.P.Q.2d 1172, 1177 (Fed. Cir. 1996). “An-

obvious-to-try situation exists when a general disclosure may pique the scientist curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claim result would be obtained if certain directions were pursued.” *In re Eli Lilly and Co.*, 14 U.S.P.Q.2d 1741, 1743 (Fed. Cir. 1990).

As discussed above, Tomioca merely describes the use of shorter timeslots for broadcast/multicast communication, so that data can be more efficiently grouped during broadcast/multicast to result in fewer unused portions within those time slots. In contrast, Rohani discloses inserting slots (42, 44, 46, 48) within a frame to be allow the switching of frequencies among multiple transmitters to monitor each of the transmitters for degraded conditions (col. 3, line 51 – col. 4, line 24). There is simply no teaching, suggestion or motivation for one having ordinary skill in the art to combine Rohani with Tomioca. Moreover, the Office Action’s stated motivation (page 4) of “increasing channel efficiency” is specious – in what possible way, given the teaching of Rohani, would one conceivably shorten the “inactive” time slots (i.e., the slots designated for frequency switching) to purportedly obtain “increased channel efficiency?” Applicants respectfully submit the rejection is improper and should be withdrawn.

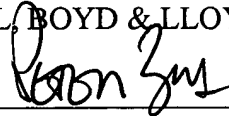
In light of the foregoing comments, the Applicants respectfully submit that independent claim 11 is not anticipated by Rohani and request that the rejection of this claim be withdrawn, accordingly.

With respect to independent claims 12, 13 and 15, these claims are believed to be allowable on their merits and also due to their dependencies on independent claim 11. Accordingly, the Applicants request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BELL BOYD & LLOYD LLC

BY


Peter Zura

Reg. No. 48,196

Customer No. 29177

Phone: (312) 807-4208

Dated: November 14, 2005